

from a long pairing of *S. ceanothi* ♀ with *S. gloveri* ♂, were the only ones that were fertile. Unfortunately the larvae, reared on willow and plum, all died, some reaching, like *S. ceanothi*, the third stage.

The pairing of *S. ceanothi* ♀ with *S. gloveri* ♂, was from the evening of 20 to the evening of 21 May. The larvae hatched from 15 to 21 June; the majority having hatched 16 and 17 June.

First stage. Larger larvae, black; smaller ones, fallow; the colors becoming of a more uniform hue as the larvae increased in size. Very much like *S. cecropia* larvae. Second stage. Larvae yellow, with black tubercles; head black. Third stage. Back, bluish; sides, yellow. Tubercles on back,

orange-red; tubercles on sides, blue; head, yellow.

The other crossings resulting from the keeping of various species together in large cages, when ♂ and ♀ moths of the same species were not obtained at the same time, are the following: in a hot-house, 22 May, *Telea polyphemus* ♀ and *Attacus mylitta* ♂ of the Bombay race; *T. polyphemus* ♀ and *Attacus pernyi* ♂; *Samia gloveri* ♀ and *A. pernyi* ♂: in my house at ordinary temperature, 12 and 13 June, *Samia ceanothi* ♀ and *S. cecropia* ♂; 15 June, *S. gloveri* ♀ and *S. cecropia* ♂; 18 and 19 June, *S. cecropia* ♀ and *S. ceanothi* ♂. In all the above cases, the ova were infertile.

ON AN AQUATIC SPHINX LARVA.

BY HERMANN AUGUST HAGEN, CAMBRIDGE, MASS.

The following letter from the Baron von Reizenstein, in New Orleans, La., was sent to me as a scientific communication by Dr. J. L. LeConte, of Philadelphia:—

“From larvae and pupae of a sphinx in my possession, there is every reason for believing that I have made a new acquisition to the lepidopterous fauna of Louisiana. They belong to the genus *Philampelus*, but the larvae far exceed in size those of the other known *sphingidae*, even of the true sphinx *Macrosila rustica* (*Sphinx chionanthi*). I found the larvae feeding on the floating *Nymphaea*, in the very centre of a draining canal in the outskirts of the city. When I discovered them, their whole body, with the exception of the first three segments, was submerged in the water. When they had devoured one patch of the water plants, they swam with great facility to a new one, the first instance I ever experienced of this habit in the larva of a sphinx, or in any

caterpillar. As I am familiar with all the other known larvae of the genus *Philampelus*, and it is not probably that of *Ph. labruscae*, a strictly tropical species, which I do not know, so it is very likely an entirely new species.

Of the other species of *Philampelus* (peculiar only to the new continent) are until now only known and described: *Philampelus vitis* Linn., *Ph. achemon*, *Ph. satellitia*, *Ph. fasciatus*, and *Ph. lycaon* Cram. (*posticatus* Grote), all occurring here, except *achemon*, a northern species, and whose larvae are all known to me.

There remains then only *Philampelus labruscae*, which I do not believe is the sphinx in question. Of 25 larvae (now all pupae) in my possession, I preserved one in alcohol, to have an “*argumentum ad hominem*” for a further occasion, when I will prepare a correct drawing of the insect in all its stages.